

Alton Towers Pods: Development Phase 2

Ecological Construction Management Plan

May 2018



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Baker Consultants is an ecology and sustainability consultancy. We work in terrestrial, freshwater and marine environments, providing a range of services for industry, government, developers, public services and utilities.

Baker Consultants comprises a highly experienced team of professional ecologists. We do wildlife surveys - but they are only the first steps in the process for most projects. We are also involved in ecological assessment, environmental law, biodiversity management and design planning.

We don't just work with wildlife, because we know that communication with clients, design teams and conservation bodies is the key to project success. Explaining the implications of survey data, and interpreting legislation, policy and practice is one of our strengths. We help decisions to be made and actions taken, allowing constraints to be kept to a minimum and project risks to be managed.

Our approach is scientific, pragmatic and creative. Alongside tried and tested methods we seek to innovate, introduce clients to new ways of thinking and always deliver sound commercial awareness. You will find us honest and approachable, but we're not afraid to be robust and challenging - or to ask difficult questions.

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Where field investigations have been carried out, these have been restricted to the agreed scope of works and carried out to a level of detail required to achieve the stated objectives of the services. Natural habitats and species distributions may change over time and further data should be sought following any significant delay from the publication of this document.

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I Introduction

I.1 The Proposed Development

- 1.1.1 Alton Towers Resort is seeking planning permission for Phase 2 of a development of the 'Enchanted Village' (herein referred to as the 'site'), to comprise additional guest accommodation and associated facilities. This is within an area to the north of the existing Phase 1 village, which was granted planning permission in May 2014 (ref SMD/2014/0107).
- 1.1.2 An ecological appraisal has already been undertaken for the site (dated February 2018), and this report addresses the mitigation measures that will be undertaken during the construction process to avoid and reduce ecological impacts. This will ensure that the development will comply with current nature conservation policy and legislation.
- 1.1.3 Since the original submission, an amended scheme has been submitted, which removed some of the support buildings, but has retained 102 accommodation pods in a different layout.

I.2 Ecological Receptors

- 1.2.1 The ecological assessment, set out in detail below, has found an overall low level of nature conservation interest with regard to the habitats on the site. However, the established trees and vegetation on the site provide habitat to bats and birds, and evidence of badger use has been found. In addition, some areas of the grassland within the site support a moderately diverse fungi community.

I.3 Recommended Condition

- 1.3.1 Following the ecological appraisal submitted during planning, the Local Planning Authority (Mark Preece email, dated 23 April 2018), recommended that the following Condition should be placed on the consent for the scheme:

Prior to the commencement of development an Ecological Construction Management plan (ECMP) shall be submitted to and approved in writing by the Local Planning Authority. The ECMP shall include the following detail:-

- a) To avoid impacts on badgers trenches or other excavations left open for more than 12 hours should be provided with an escape ramp (simply a plank of wood with no step at the base, reaching up to ground level or slightly above) for any wildlife to be able to escape.

- b) Works shall be timed outside the bird nesting season between 1st March and 31st August inclusive. If this is not possible before works are undertaken a check for breeding birds shall be carried out by a suitably qualified ecological consultant. If nesting birds are located work shall cease until nesting is completed and fledged young have departed the site.
- c) All vegetation removal and landscaping shall form part of a detailed landscaping plan at the reserved matters/ full application stage. Landscaping shall advocate the use of native species that will have positive biodiversity benefits. Tree and planting within the Alton Towers site along access drives should be considered to compensate for the loss of species rich grassland.
- d) Hedge plants should be 40-60cm transplants of locally common native species and of British provenance (preferably local) and should comply to British Standard 3936. Hedgerows should be planted with 6 plants per metre in two staggered rows, about 25cm apart with plants at approximately 45cm in each row. Hedgerow plants should be protected with a hedge guard and secured by a cane or stake. Full details including methods of, establishment, remedial replacements, weed control, plus long-term aftercare should be provided.
- e) Provision of multiple new bat roosting opportunities in the northern tree belt. Full details of the design of boxes and the proposed locations shall be provided.
- f) The biodiversity value of the development shall be enhanced by the provision of nest boxes for use by nesting house sparrows (Red listed RSPB species of conservation concern).
- g) The design and location of lighting shall not impact on foraging or commuting bats or trees with potential bat roosting features, and minimise disturbance to other wildlife. Details of a lighting plan should be submitted to the local planning authority for approval.

The development shall be completed in accordance with the approved ECMP. Reason:- In the interests of protected species and biodiversity enhancement.

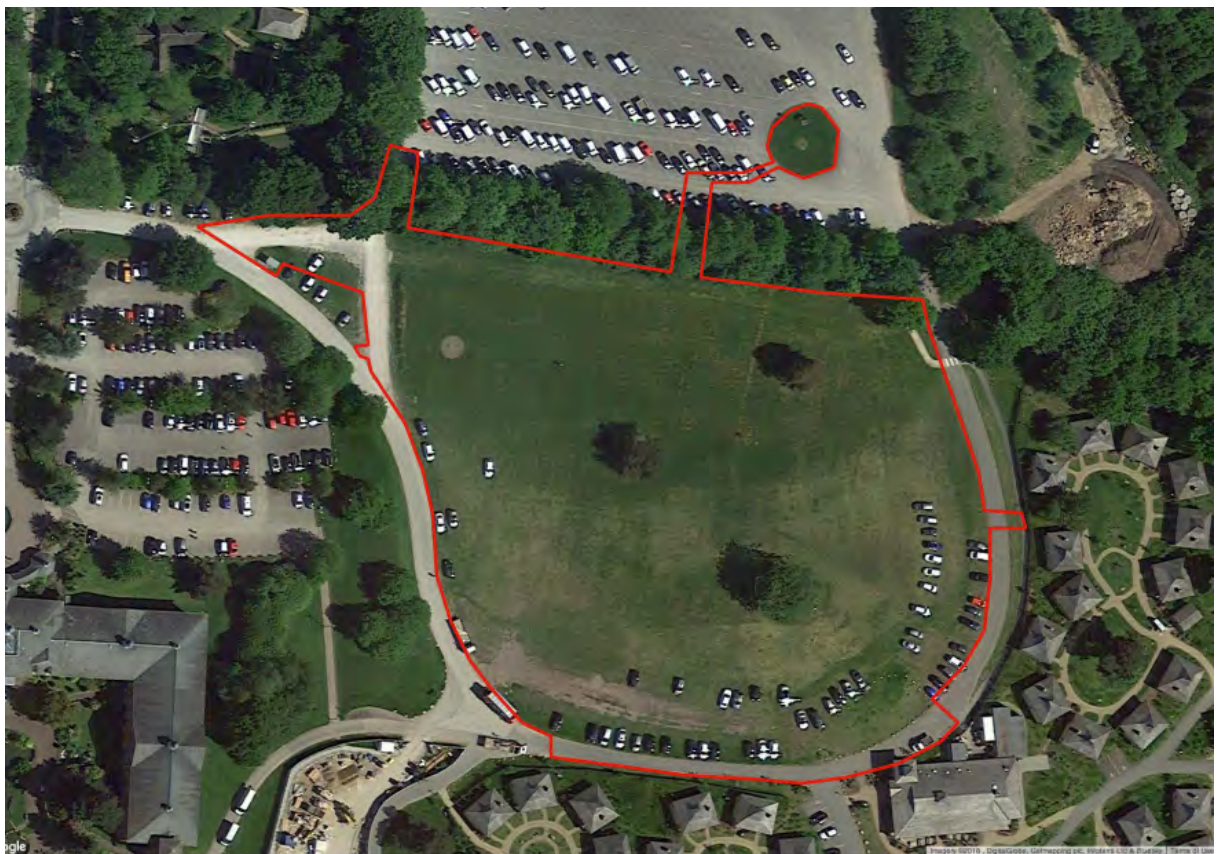
- 1.3.2 The current document sets out to address this recommended Condition, prior to determination of the planning application, so that ecological mitigation can be assessed and covered under the consenting process.

2 Site Background

2.1 Site Description

- 2.1.1 Alton Towers Resort (ATR) is located near to the village of Alton in Staffordshire, with a central Ordnance Survey grid reference of SK 087 431.
- 2.1.2 The proposed development site for the Phase 2 Pods currently comprises amenity and poor semi-improved grassland. There are also two established Scot's pine *Pinus sylvestris* trees on the site, and a large mature beech *Fagus sylvatica* which has recently been heavily topped. A line of established trees is then immediately present to the north of the site forming the boundary with car park 'J', and an access road forms the remaining site boundary. Figure 1 below shows the context of the Site (proposed development plans are provided in Appendices 1 and 2).

Figure 1. Site context, showing approximate red-line boundary



Source: Google Earth

- 2.1.3 Beyond the immediate site is the main Alton Towers Resort, which now includes the lodges and complex of the recently completed Enchanted Village (Phase 1) to the south and east of the site, and the Alton Towers Hotel and associated car parking to the west. Scattered established trees, amenity

grassland, and hard and soft landscaping are also present amongst this wider complex.

- 2.1.4 Further afield from the resort facilities there is ancient replanted woodland (Park Banks and Abbey Wood) and the River Churnet present to the south, with ancient and semi-natural woodland (Plumpton Banks Plantation) and Brookley's Lake to the east. Otherwise, the surrounding habitat is predominantly of a parkland and pastoral nature, in a largely rural landscape.

2.2 Bats

- 2.2.1 The desk study and field surveys have identified the presence of a number of bat species at or near the site, as listed in Table 1 below.

Table 1. Bat species recorded locally

Common Name	Scientific name
Brown long-eared bat	<i>Plecotus auritus</i>
Daubenton's bat	<i>Myotis daubentonii</i>
Natterer's bat	<i>Myotis nattereri</i>
Whiskered/Brandt's bat	<i>Myotis mystacinus/brandtii</i>
Soprano pipistrelle	<i>Pipistrellus pygmaeus</i>
Common pipistrelle	<i>Pipistrellus pipistrellus</i>
Leisler's bat	<i>Nyctalus leisleri</i>

- 2.2.2 Bats and their habitats are protected under the Wildlife and Countryside Act 1981 (as amended by the CROW Act 2000), and by the Conservation of Habitats and Species Regulations 2010. In addition, seven bat species are listed as Species of Principal Importance under the provisions of the NERC Act 2006. Three of these species: soprano pipistrelle, noctule, and the brown long-eared bat have been recorded during the bat surveys at this site.

2.3 Badger

- 2.3.1 Evidence of badgers using the site (fresh badger dung piles) was recorded during the 2017 survey. It is considered likely that badger are using the site to commute between foraging areas/setts off-site, and possibly for foraging.

2.4 Birds

- 2.4.1 The grassland is too exposed and disturbed by passing vehicles, maintenance machinery and people to support ground nesting birds. However, the trees and the woodland will support nesting birds, providing suitable habitat for a range of species. Impacts on this group of species can be suitably avoided by programming site clearance and construction outside of the spring / summer nesting season.

3 Recommendations

3.1 Badgers

3.1.1 Section (a) of the recommended Condition requires that:

To avoid impacts on badgers trenches or other excavations left open for more than 12 hours should be provided with an escape ramp (simply a plank of wood with no step at the base, reaching up to ground level or slightly above) for any wildlife to be able to escape.

- 3.1.2 In order to avoid impacts upon badgers and other terrestrial wildlife, deep open excavations during construction will be covered overnight, although any shallower trenches may be fitted with some form of ramp to allow animals to escape if necessary. All operations should be carried out with due care and, if any wildlife is discovered during works, it should be allowed to escape unharmed. If there is any doubt as to how to proceed, all work will cease and a qualified ecologist will be contacted.

3.2 Breeding Birds

3.2.1 Sections (b) and (f) of the recommended Condition require that:

Works shall be timed outside the bird nesting season between 1st March and 31st August inclusive. If this is not possible before works are undertaken a check for breeding birds shall be carried out by a suitably qualified ecological consultant. If nesting birds are located work shall cease until nesting is completed and fledged young have departed the site.

The biodiversity value of the development shall be enhanced by the provision of nest boxes for use by nesting house sparrows (Red listed RSPB species of conservation concern).

- 3.2.2 To avoid committing an offence under the Wildlife and Countryside Act it will be necessary to programme all construction works that might directly impact upon breeding birds for the September to February period i.e. outside the bird breeding season.
- 3.2.3 If this cannot be achieved, then site works during this period will only take place following a check for nests by an experienced ecologist. If any nests are found during such an inspection, then the nest (together with a suitable buffer) will be retained until the young have fledged and the nest has been vacated naturally.

- 3.2.4 Six nest boxes will be provided for house sparrows. These will be Schwegler Nestbox 1B design (or equivalent), with a 32mm entrance hole (Figure 2). They will be fitted at >2m height on trees in the woodland belt to the north of the development.

Figure 2. Schwegler 1B Nestbox



3.3 Enhancements for Bats

- 3.3.1 Section (e) of the recommended Condition requires:

Provision of multiple new bat roosting opportunities in the northern tree belt. Full details of the design of boxes and the proposed locations shall be provided.

- 3.3.2 Eight bat boxes will be provided in the woodland belt to the north of the development, or in adjacent areas if suitable trees are found to be lacking here. Four designs of bat box will be provided, with two boxes of each design being installed on site. Recommended bat box types include Schwegler bat boxes: 1FD, 1FF, and 2F-DFP, along with Kent timber boxes (Figure 3). These will all be installed under the supervision of a licensed bat worker.

Figure 3. Bat boxes to be provided on site. Clockwise from top left: IFD, IFF, 2F-DFP, Kent



3.4 Landscaping Scheme

3.4.1 Sections (c) and (d) of the recommended Condition require that:

c) All vegetation removal and landscaping shall form part of a detailed landscaping plan at the reserved matters/ full application stage. Landscaping shall advocate the use of native species that will have positive biodiversity benefits. Tree and planting within the Alton Towers site along access drives should be considered to compensate for the loss of species rich grassland.

d). Hedge plants should be 40-60cm transplants of locally common native species and of British provenance (preferably local) and should comply to British Standard 3936. Hedgerows should be planted with 6 plants per metre in two staggered rows, about 25cm apart with plants at approximately 45cm in each row. Hedgerow plants should

be protected with a hedge guard and secured by a cane or stake. Full details including methods of, establishment, remedial replacements, weed control, plus long-term aftercare should be provided.

- 3.4.2 The proposed landscaping scheme has been set out by Nichols Brown Webber in their drawing ref. 373/99-6(A). This indicates that the landscaping comprises tree planting of native species, a 'forestry' mix principally of hawthorn, goat willow, rowan and hornbeam, acting as a scrub understorey, with additional 'light standard' trees including pedunculate oak, silver birch and bird cherry. These are all valuable trees in terms of providing nesting habitat, and supporting high levels of invertebrate prey for birds and bats. As a result, they will provide positive biodiversity benefits in line with section (c) of the Condition.
- 3.4.3 No hedgerow planting is being provided at the site. However, the 'forestry' mix will be planted in 0.3 x 0.3 x 0.3m treepits, with 10L PAS 100 planting compost, Rootgrow mycorrhiza, Broadleaf P4 polymer, 1.2m x 32mm x 32mm tantalised stake, 90cm green Tubex Shelterguard shelters and 75mm bark mulch. The 'light standard' tree planting arrangements are much the same, but with a 0.6m size treepit and 2.0m x 75mm diameter tantalised stake (see drawing ref. 373/99-6(A)). The landscape proposals therefore set out full details of establishment. Aftercare details would be a standard five-year programme for weed control and replacement of failures. The planting will be in a highly visible location, bordering the new visitor facilities, and as such, will be well managed in accordance with Alton Towers normal practice.

3.5 Lighting Scheme

- 3.5.1 Section (g) of the recommended Condition requires that:

The design and location of lighting shall not impact on foraging or commuting bats or trees with potential bat roosting features, and minimise disturbance to other wildlife. Details of a lighting plan should be submitted to the local planning authority for approval.

- 3.5.2 Artificial light emittance above 1 lux can adversely affect bats, which are all legally protected species. In particular, two of the bat species recorded during the surveys, namely the brown long-eared bat and Myotis bats, are classified as 'light averse'. There is a known nearby roost of brown long-eared bats, and both taxa may also have been under-recorded on the site given their cryptic and quiet echolocation calls.
- 3.5.3 Therefore, lighting levels within the new development will be kept to a minimum, in particular around mature trees and the edge habitat to the north of the site, the main areas of bat activity. In accordance with guidance provided by BCT (2014), the emittance of artificial light within such foraging and

commuting areas will be <1 lux, typical of a sensitive lighting scheme recommended for bats.

- 3.5.4 The above recommendations have been made with regard to current ‘good practice guidance’ with regard to bats and lighting, particularly the Interim Guidance published by BCT in 2014, and the Overview of Current Evidence and Mitigation Guidance arising from a joint study conducted by the University of Bristol, Natural England and BCT in 2013 (Stone, 2013). This current guidance states that any artificial light emitted as part of a development should also avoid all bat roost exit points, and any known flight paths leading to and from roosts.
- 3.5.5 The proposed car park lighting scheme for Car Park J, designed by eosDesign, was covered under a previously approved planning application – reference: SMD/2018/0050. This utilises 33 Carina LED polycarbonate floodlights, and will provide an average illuminance of 6.5 lx within the car park, up to a maximum of 49.2 lx in the brightest areas. However, outside of the car park, the potential light spill into the neighbouring woodland areas is low. Here, the illuminance average is 0.19 lx, with a maximum of 0.63 lx, so lighting levels within the potential bat habitat are below the recommended 1 lx threshold.
- 3.5.6 From the modelled lighting figures, it can be concluded that the proposed lighting scheme is unlikely to directly affect the Nicklin’s Farm bat roosts, and foraging and commuting areas close to the woodland edge to the west and the treeline to the south of the car park, will not be exposed to light levels that would significantly affect bat activity. Therefore adverse ecological effects have been discounted.

3.6 Conclusion

- 3.6.1 Given the recommendations set out above, and the mitigation they will provide to reduce potential adverse impacts and provide biodiversity gains, it is considered that the requirements of planning policy and wildlife legislation will be fully met, and the recommended Condition discharged.

4 References

Bat Conservation Trust (Hundt, L., 2012) *Bat Surveys Good Practice Guidelines*, 2nd Edition. Bat Conservation Trust, London.

Bat Conservation Trust (2014) Artificial lighting and wildlife Interim Guidance: Recommendations to help minimise the impact artificial lighting. BCT

Stone, E.L. (2013) Bats and lighting: Overview of current evidence and mitigation guidance. University of Bristol

5 Appendix I: Proposed Development



- Key: See Important Notes on 373/99/2**
- Existing tree canopies and i/d. For detail see Tree Heritage report
 - Trees protection in accordance with BS 5837:2012 fig 2
 - Tree Category A Root Protection Area
 - Tree Category B Root Protection Area
 - Tree Category C Root Protection Area. Trees without RPA are poor/to be removed.
 - Existing Public Footpaths
 - ATR Projected site wide paths
 - New Pod accommodation showing Base levels and Pod numbers
 - New porous block or tarmac surfaces with stabilised gravel finish.
 - Gentle routes for disabled guests (<1:22)
 - Planning Boundary
 - 1.1m post & rope fencing
 - 1.1m post and rail fencing as Engineers detail
 - All internal plans are shown for illustrative purposes only

27.4.18
A 27.4.18 Pod Layout amended

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PROJECT
Alton Towers Resort Pods

DRAWING TITLE
Site Plan showing Constraints

PLOT DATE 3.1.18	CHECKED
SCALE 1/1000 @ A3 1/500 @ A1	STATUS \$
PROJECT NO 373/99/3	REVISION A



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